

IN THE CLAIMS:

1. (Currently amended) A method of increasing numbers of new brain cells affecting new neuron growth in a patient comprising the steps of: administering, post ischemic event to a patient in need thereof, post neuronal injury, a therapeutic amount of a therapeutic compound selected from the group consisting of L-arginine, sildenafil, statins, and phosphodiesterase inhibitors for increasing levels of cGMP to a patient in need of neurogenesis; affecting new neuron growth increasing numbers of new brain cells; labeling the new brain cells with BrdU; and identifying increased numbers of new neurons brain cells by detecting BrdU labeled brain cells.

2-17. (Canceled)

18. (New) The method of claim 1, wherein the compounds increase levels of cGMP in the patient.